

مراجعة

كيمياء عامة CH3

لطلاب السنة التحضيرية بجامعة الملك خالد
بأبها - المحالة

2015

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لا تنسى زيارة المدونة <http://kku-a.blogspot.com>

و نشر المدونة بين الطلاب لتعلم الفائدة

1) Light behaves as :

a) wave b) Partical c) both a and b
 d) neither a nor b

2) The wavelength of sodium lamps light is 589 nm what is frequency of this radiation? $C = 3 \times 10^8 \text{ m s}^{-1}$

a) $5.09 \times 10^{12} \text{ sec}^{-1}$ b) $5.09 \times 10^5 \text{ sec}^{-1}$ c) $5.09 \times 10^{14} \text{ sec}^{-1}$
 d) $3 \times 10^5 \text{ sec}^{-1}$

3) PAULI EXCLUSION PRINCIPLE state that

a) Electrons occupy degenerate orbitals singlely to the maximum extent
 b) No two electrons in an atom can have the same set four quantum numbers
 c) Electrons travels in waves like light

d) Electron of H atom move in a circular path

e) The distance between identical points on successive waves is called :

a) Frequency b) Period time c) Wavenumber
 d) Wavelength

7) The electromagnetic radiation with longest wavelength is

a) Radio wave b) infrared c) x-rays d) U.V.

8) Which of the following type of radiation has the highest energy :

a) U.V. b) Microwave c) infrared

a) X-rays

7) The sublevel orbital which can be occupied with maximum 14 electrons is

a) 3d b) 4f c) 5s d) 6p

8) Which set of quantum numbers can be used to characterize the sublevel 3P

a) $n=4$ $l=1$ $m_l=0$ $m_s=+\frac{1}{2}$ b) $n=3$ $l=2$ $m_l=1$
 $m_s=-\frac{1}{2}$

c) $n=3$ $l=1$ $m_l=1$ $m_s=-\frac{1}{2}$ d) $n=3$ $l=0$ $m_l=0$
 $m_s=+\frac{1}{2}$

9) the electronic configuration of Cu_{29} is

a) $\text{Ar}_{18} 4s^2 3d^9$ b) $\text{Ar}_{18} 4s^1 3d^9$ c) $\text{Ar}_{18} 3d^{10} 4p^1$

d) $\text{Ar}_{18} 3d^{10}$

1) Which of sublevel is characterized by the set of quanti

numbers $n = 4$ $l = 3$ $m_l = 2$ $m_s = \frac{1}{2}$

a) 3p b) 4d c) 4p d) 4f

11) How many unpaired electrons are there in an atom

of oxygen (O_8)

a) 1 b) 2 c) 3 d) 4

12) What is electronic configuration for Ni^{2+} $\{Ni:28\}$

a) $Ar 4s^2 3d^8$ b) $Ar_{18} 4s^2 3d^6$ c) $Ar_{18} 3d^8$
d) $Ar_{18} 4s^2 3d^{10}$

13) The symbol of the element of lowest atomic number

whose ground state has six 3d electron

a) Fe $_{26}$ b) Co_{27} c) Cu_{29} d) Zn_{30}

14) Write the electronic configuration of Mg^{++} ($Mg = 12$)

a) $1s^2 2s^2 2p^6 3s^2$ b) $1s^2 2s^2 2p^6$ c) $1s^2 2s^2 2p^6$
d) $[Ne] 3s^2$

15) The number determines the shape of the or

a) l b) n c) m_l d) m

16) The number of orbitals in d ~~subshell~~ sublevel

a) 10 b) 14 c) 6 d) 5

17) The ion that is isoelectronic with Ne is ⁽¹⁶⁾

a) Na^+ b) K^+ c) Ca^{++} d) Li^+

$Na = 11$ $K = 19$ $Ca = 20$ $Li = 3$

18) The energy required to remove an electron from a gas atom or ion

a) electronegativity b) ionization Energy
 c) electron affinity d) none of them

19) Which of the following atoms has the greatest electronegativity

a) I b) Br c) Cl d) F

20) Planck suggested all energy gained or lost by an atom must be some integral multiple of a minimum amount of energy called

a) electron b) quantum c) nucleus

Which pair is given in the correct order of increasing size with respect to ionic

a) $\text{Na}^+ > \text{Na}$ b) $\text{Cr}^{+6} > \text{Cr}^{+3}$ c) $\text{Cl} > \text{Cl}^-$
 d) $\text{Ca} > \text{Mg}$

22) What is the valence shell electrons configuration of Phosphorus P_{15} ?

a) $3s^2 3p^3$ b) $3p^3$ c) $1s^2 2s^2 2p^6 3s^2$

23) The energy required to extract electron from ground state ($n=1$) to $n=3$ is

a) $2.73 \times 10^{-18} \text{ J}$ b) $4.70 \times 10^{-18} \text{ J}$ c) $1.94 \times 10^{-18} \text{ J}$ d) $1.7 \times 10^{-18} \text{ J}$

24) The ----- quantum number determines the orientation of electron Spin in the magnetic field

a) n b) m_s c) m_p d) l

25) Which of the following elements has the largest atomic radius?

a) F_9 b) B_5 c) Be_4 d) C_6

1	2	3	4	5	6	7	8	9	10	11	12
c	c	b	d	a	d	b	c	d	d	b	c
13	14	15	16	17	18	19	20	21	22	23	24
a	b	a	d	a	b	d	b	d	a	c	b
											c

تحتاجي بالتفوّف

لاتنسو نام الدّعاء

صلوة S.A

عمر طه اذا اردت ان تقارن بين طاقة محالين

ثم حساب $(n+l)$ تايل محال

الاكبر هو اعلى طاقة
اكبر $n+l$ اعلى طاقة

$$4s \quad 3d \quad 4s \quad n+l = 4+0 = 4$$

$$3d \quad n+l = 3+2 = 5$$

$$\therefore 3d > 4s$$

$$\begin{array}{ccc} 6P & 7S \\ n+l=7 & n+l=7 & 7S > 6P \end{array}$$